

Claims

1. An electrical component structure comprising a plurality of overlying substantially parallel layers, each layer providing: a lattice comprising a first set of conductive tracks arranged
5 substantially orthogonal to, and electrically connected with, a second set of conductive tracks; and conductive islands located in windows of the lattice, electrically isolated from the tracks thereof, wherein the lattice of one layer is electrically connected to the conductive islands of an adjacent layer.
- 10 2. A structure according to claim 1, wherein intersect regions of the sets of tracks of the lattice of one layer are electrically connected to the conductive islands of an adjacent layer.
3. A structure according to claim 2, wherein the intersect regions of the lattice are arranged such that the windows of each lattice have an octagonal shape.
- 15 4. A structure according to any preceding claim, wherein the conductive islands have an octagonal shape.
5. A structure according to any preceding claim, wherein the layers are substantially planar,
20 and the electrical connection between the conductive islands of one layer and the intersect regions of an adjacent layer is established by conductive elements which extend substantially perpendicular to the planes thereof.
6. A structure according to any preceding claim, wherein adjacent layers are separated by a
25 material having a relative dielectric constant greater than one.

7. A structure according to any preceding claim, wherein the lattice tracks and conductive islands are formed of metal.

5 8. A structure according to any of claims 1 to 6, wherein the lattice tracks and the conductive islands of one or more layers are formed of polysilicon material.

9. A structure according to any preceding claim, comprising two electrical terminals, the lattice tracks and conductive islands of each layer being respectively electrically connected to a
10 different one of the electrical terminals.

10. A structure according to claim 9, wherein each electrical terminal is formed by a metal plate.

15 11. A structure according to any preceding claim, wherein the structure provides a capacitor.

12. An electrical component structure comprising a plurality of overlying substantially parallel planar layers, each layer providing: a lattice comprising a first set of conductive tracks
20 arranged substantially orthogonal to, and electrically connected with, a second set of conductive tracks, crossings of the first and second sets of tracks defining intersect regions; and conductive islands located in windows of the lattice, electrically isolated from the tracks thereof, wherein adjacent layers are offset such that the conductive islands of one layer are superimposed over the

intersect regions of the adjacent layer, the lattice intersect points of the layers being electrically connected to the conductive islands of an adjacent layer by interconnecting conductive elements which extend substantially perpendicular to the plane of the layers.

5 13. A method of forming an electrical component, comprising:

(i) forming a plurality of overlying substantially parallel layers, each layer providing (a) a lattice comprising a first set of conductive tracks arranged substantially orthogonal to, and electrically connected with, a second set of conductive tracks, and (b) conductive islands located in windows of the lattice, electrically isolated from the tracks thereof; and

10 (ii) electrically connecting the lattice of one layer to the conductive islands of an adjacent layer.

14. An electrical component structure, constructed and arranged substantially as herein shown and described with respect to any of Figures 3 to 6 of the accompanying drawings.

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15. A method of forming an electrical component, substantially as herein described with reference to any of Figures 3 to 6 of the accompanying drawings.